

Applicant: Association of State Wetland Managers

Project Title: Building Capacity for States to Use Monitoring and Assessment to Improve Implementation of Other Core Elements

Potential Partners: All 50 states including state agencies that carry out core element programs (Department of Environmental Quality, Department of Natural Resources, etc.), interested Tribes, EPA Regions, Corps district offices, FWS, NOAA, wetland consultants, scientists, conservation and environmental groups and other organizations.

National Priority Area 1 Core Elements Framework *including Monitoring and Assessment; Voluntary Restoration and Protection: Regulatory Approaches and Wetland-Specific Water Quality Standards*

Key personnel: Jeanne Christie, Executive Director, Association of State Wetland Managers, W: (207) 892-3399 C: (207) 310-8708 ; e-mail: jeanne.christie@aswm.org

Peg Bostwick: Senior Staff Policy Analyst, Association of State Wetland Managers
W: 517-626-6981, e-mail: peg@sweetgrass-jacobs.com

Geographic Location: Nationwide

Total Project Cost: \$250,000

EPA: \$187,500

ASWM: \$62,500

Abstract: The primary goal of this project is to encourage the use of data documenting wetland condition, function, status and trends to support development and implementation of other state wetland program core elements. This will lead to increased success in achieving the national goals of protecting aquatic ecosystems. In addition the project will address climate change issues using EPA's core elements framework. ASWM will collaborate with states, interested tribes, EPA Regions and other partners to identify and evaluate opportunities to integrate monitoring and assessment data, and climate change considerations into EPA's core elements framework. Products of this project will include a "best practices" report for the states and tribes including guidance on the integration of monitoring and assessment data into other EPA Core Essential Elements. This report along with supporting information will be posted and maintained on the ASWM webpages. During the development of this material, ASWM will hold two (2) state/federal coordination workshops (spring 2013 and 2014) that will incorporate discussion of monitoring and assessment and its application to implementing the other core elements. ASWM will also hold eight (8) webinars or conference calls open to interested states and tribes as well as EPA Regions and other federal agencies to provide technical and practical information regarding the use of monitoring and assessment data, case studies, and additional information available from the research/academic community. As a result of this collaboration states and tribes will refine wetland programs improve wetland protection, conservation and restoration.

PROJECT DESCRIPTION:

(I) National Priority Area: Core Elements Framework. ASWM proposes to provide technical assistance to states and tribes nationwide to refine their core essential elements framework by (a) integrating monitoring and assessment into other core elements, and (b) addressing climate change within the core element framework. *The primary goal of this project is to encourage the use of robust, current data documenting wetland condition, function, status and trends to support other wetland program elements, and thereby to increase success in achieving the national goals of protecting aquatic ecosystems. In addition the proposal will assist in addressing climate change issues using EPA's core elements framework for state and tribal wetland programs.* While the focal point of the project is monitoring and assessment, the project addresses all four of the EPA defined Core Essential Elements.

In recent years, states and tribes have made rapid advances in the assessment and monitoring of wetlands at multiple levels (landscape, rapid site assessment, detailed site assessment).

Simultaneously, the development of wetland regulatory, restoration, and water quality program areas has relied to a great extent on more generalized information and literature values, modeling, and best professional judgment. Incorporating data from state and national wetland monitoring programs will provide a feedback loop to refine and strengthen other program elements. Data regarding condition, status, and trends serves as a common thread, uniting program elements and supporting adaptive management. Consideration of climate change mitigation and adaptation functions can also be tied to the assessment of wetland functions, and to strengthening of core essential elements.

However there are constraints in the opportunities states have to develop and apply monitoring and assessment information to the other core elements. State budgets are tight and resources available to develop and maintain robust wetland monitoring programs are very limited. States will be interested in opportunities to use information gathered as part of routine activities such as wetland delineations and mapping projects. The use of digital tools such as GIS will be important. There may only be one site visit to an individual wetland. Many states have legal requirements to specifically take into account some combination of condition, function and value, but the requirements of which ones to consider vary from state to state.

ASWM will rely on collaboration among the member states, tribes, EPA Regions and other partners to identify and evaluate mechanisms for integration of monitoring and assessment data, and climate change considerations. ASWM's network for collaboration includes an existing database of over 600 state and tribal staff, who can be connected through conference calls, webinars, public and password-protected pages on the ASWM website, and in-person meetings such as the ASWM Annual State Federal Coordination Workshop generally held in March.

Project tasks: ASWM will invite states, tribes, federal agencies, and other partners to participate in a national workgroup to collaborate on approaches for integration of monitoring and assessment data into regulatory, wetland water quality standards and restoration/protection programs. ASWM will serve as the convener and host, will organize conference calls and webinars, summarize discussions, gather additional information, post information on the web and provide support and direction for the workgroup. States, tribes, and other participants will contribute to discussions, may make technical presentations at conference or in webinars, and

will review and comment on draft reports and other products. ASWM will be responsible for production of final reports and products. The grant workplan will include the following steps to be taken to meet project goals:

1) **Establish coordination with states, tribes, and other partners (\$3,000).** ASWM will identify state and tribal wetland programs with active monitoring and assessment elements based on knowledge of state programs and with assistance from EPA's National Wetland Monitoring and Assessment Work Group. In addition, we will solicit interest among other states and tribes – including those who have not yet established a comprehensive wetland monitoring program but are interested in doing so— and other partners including EPA, USFWS, and Corps research branches, academic contacts, and groups such as the national Wetland Mapping Consortium.

2) **Gather information regarding existing strategies for building wetland program elements based on monitoring and assessment data (\$55,000).** ASWM will review state/tribal strategic plans, past conference presentations, and similar materials to identify ongoing use of monitoring and assessment information to support or strengthen other program elements. A catalog of information will be established, and added to throughout this project. This catalog will be organized based on the type of data (landscape level, rapid site assessment, or detailed site assessment) and by core essential element. ASWM will be looking for examples of a range of potential applications of monitoring data such as the following.

In regulatory programs:

- To better review permit applications by accurately assessing the condition of impacted wetlands as well as secondary impacts on associated aquatic resources;
- To evaluate the success of mitigation in replacing lost wetland functions and benefits;
- To assess the cumulative impacts of impacts authorized under permit programs;

- To evaluate adverse unauthorized impacts in compliance and enforcement actions;
- To build support for regulatory programs by providing a strong scientific basis for decision-making.

In wetland protection and restoration programs:

- To define rare wetland resources, wetlands at risk, and priorities for protection programs;
- To evaluate landscape level (watershed) wetland restoration needs and priorities in coordination with nonpoint source and other land use projects;
- To evaluate the success of restoration and protection programs;
- To establish a baseline and evaluate long term trends associated with climate change impacts.

In development and use of wetland water quality standards:

- To identify and test effective metrics for wetland assessment;
- To directly develop and refine water quality standards for wetlands appropriate for a particular state or tribe;
- To evaluate the status and condition of wetlands relative to state/tribal standards through a well-planned feedback loop.

3) Collaborative synthesis of best practices and preparation of technical guidance for states/tribes on integrated use of wetland monitoring and assessment data (\$92,000).

ASWM will gather information working with partners through regularly scheduled conference calls and webinars for the presentation of more technical information, ASWM will also talk directly with wetland program staff, and review online materials. In developing best practices considerations will include the kind and extent of data needed for different types of decision making (e.g. permitting decisions versus voluntary restoration project priorities); effectiveness of

various types of wetland data (e.g. remote landscape level mapping versus on-site monitoring); availability of existing data (e.g. site visits) and strategies to make most effective use of program funding. One of the overarching objectives of this process will to be support an active discussion among wetland scientists and policy makers, in order to convey programmatic needs and constraints, identify effective monitoring tools, and ensure that wetland metrics are accurately understood, interpreted, and utilized in program development.

ASWM will provide a national forum for discussion of use of monitoring data at ASWM national wetland workshops in 2013 and 2014. In particular, ASWM will assist in disseminating information regarding the National Wetland Condition Assessment (NWCA) in expectation of release of the final report in 2013. Travel assistance will be provided to encourage state/tribal wetland program managers with a demonstrated interest in use of monitoring and assessment data to attend this meeting. Assistance will be awarded to 15 or more states/tribes per year (two years) based on (a) specific requests for assistance from states or tribes; (b) representation of differing geographic regions; (c) participation in the conference through presentations or contributions to panel discussions; and (d) availability of funding. Funds will be distributed to attempt to support at least one attendee from as many states/tribes as possible.

ASWM will further encourage both discussion and dissemination of information through digital and social media including its *Compleat Wetlander* blog, Linked-in and Facebook webpages, online discussion forums, and newsletters. ASWM will encourage states and tribes to use online

training, new web tools, access to peers and other services to build the core elements of state and tribal wetland programs.

4) Integration of climate change considerations into core essential elements (\$50,000).

Wetlands play a significant role in climate change mitigation, and adaptation. This project will take advantage of gatherings of states, tribes, and water quality specialists to investigate strategies to incorporate these issues into wetland program strategies. Case studies and best practices will be highlighted on ASWM climate change webpages.

5) Development of technical guidance and related documentation (\$50,000). ASWM will document technical information and best practices for the use of monitoring and assessment data to implement the core essential elements in guidance for state and tribal agencies. This guidance and related materials including case studies and links to current state programs will be posted and maintained on the ASWM webpages. Web-based information and training can provide useful, easily accessible resources to states and tribes if it is well designed. A successful website will help states/tribes build a bridge between best practices used in other states/tribes and the opportunities and constraints in incorporating the core elements in their existing wetland programs. A separate strategy to address climate change considerations within the Core Essential Elements framework will also be prepared and posted.

(II) Environmental Results and Measuring Progress

Objective/Link to EPA Strategic Plan: The proposed project supports EPA Goal 2: Protecting America's Waters, Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems, by more directly linking monitoring and assessment data to the regulation, protection and restoration, and development of water quality standards for wetlands in state and

tribal programs. Use of current data will more accurately identify resource needs within a state, target resources, support adaptive management, and allow evaluation of the effectiveness programs in meeting goals including supporting a watershed approach. The sharing of information among states and tribes will increase efficiency through scientific collaboration and peer to peer learning. Collectively these actions will protect and increase wetlands.

Results (Output): Products of this project will include the following outputs. ASWM will develop a “best practices” report for the states and tribes including guidance on the integration of monitoring and assessment data into other EPA Core Essential Elements. This report along with supporting information will be posted and maintained on the ASWM webpages. During the development of this material, ASWM will hold two (2) state/federal coordination workshops (spring 2013 and 2014) that will incorporate discussion of monitoring and assessment and its application to implementing the other core elements. ASWM will also hold eight (8) webinars or conference calls open to interested states and tribes as well as EPA Regions and other federal agencies to provide technical and practical information regarding the use of monitoring and assessment data, case studies, and to additional information available from the research/academic community. Information gathered through conference calls and webinars will be posted on the ASWM website. As a result of this collaboration, it is anticipated that at least 12 states/tribes will refine state program approaches to support regulatory, restoration/protection, and water quality standards with increased use of monitoring and assessment data.

State and tribes will increase consideration of climate change issues in core wetland program areas including monitoring assessment; regulation; and restoration and preservation.

Anticipated Environmental Improvement (Outcome): Scientific monitoring and assessment will provide data to refine state/tribal understanding of existing wetland condition and program results. Monitoring can also establish a baseline for longer term evaluation of the impacts of climate change, and effectiveness of adaptation methods. Increased ability to evaluate wetland condition and function will improve permit and enforcement actions in states that operate regulatory programs, reducing the loss of wetlands that provide significant public benefits. Evaluation of mitigation success will increase the effective replacement of unavoidably impacted natural wetlands. Water quality standards for wetlands that are based on sound monitoring and assessment data will improve the ability of states and tribes to protect wetlands through dredge and fill permitting and other state regulatory programs. Both landscape level and site level assessment will improve selection, prioritization and design of restoration or preservation projects at the watershed scale, thereby improving decision making in a range of wetland programs. Together these actions will increase the quality and quantity of the Nation's wetlands.

Geographic Location: This project is national in scope. All states, active tribes, EPA regions, as well as other federal agencies and other partners will be invited to participate in the project.

(III) Milestone Schedule:

	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	5 th quarter	6 th quarter	7 th quarter	8 th quarter
Tasks	Identify interested states/tribes and others. Organize collaboration.	Gather and catalog existing materials.	Focus on use of monitoring and assessment data in regulatory programs.	Focus on climate change mitigation strategies.	Focus on use of monitoring and assessment data in restoration/p reservation programs.	Focus on climate change adaptation strategies.	Focus on use of monitoring and assessment data in water quality standards.	Complete final report, guidance, and post all web materials.

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Workshop, webinar, and conference call schedule	State-Federal Workshop Conference call – states/tribes and others.	Webinar – Case study or technical material	Conference call	Webinar – Case study or technical material	State-Federal Wetland Workshop Conference call	Webinar – Case study or technical material	Conference call	Webinar – Final report.
Transfer of results.	Materials posted to ASWM website Publicized through digital media	Materials posted to ASWM website. Publicized through digital media	Material posted to ASWM website Publicized through digital media Biannual Report.	Materials posted to ASWM website Publicized through digital media	Materials posted to ASWM website Publicized through digital media	Materials posted to ASWM website Publicized through digital media Biannual report.	Materials posted to ASWM website Publicized through digital media	Materials posted to ASWM website Publicized through digital media Final report.

(IV) Projects Partnerships:

ASWM will invite all states and all tribes (tribes will be identified with the assistance of the EPA regions) as well as EPA regional staff to participate in the project workgroup. These partners serve as both a primary source and primary recipient of the products of this project. Currently approximately 38 states and 11 tribes participate in one or more of ASWM’s current projects by asking questions, providing information about their activities and using information provided by ASWM to improve programs. Additional partners — including the Wetland Mapping Consortium¹, Corps district offices, FWS, NOAA, wetland consultants, scientists, conservation and environmental groups and other organizations—will be invited to participate in those portions of the project (including climate change issues) where they have an interest and expertise to contribute to the project products.

¹ ASWM helped to organize, and currently hosts the Wetland Mapping Consortium.

(V) Transfer of Results:

The project will transfer results to states, tribes, EPA Regions, project managers for government agencies and nonprofit organizations and other partners. States, federal agency staff and nonprofit organizations that participate in the national workgroup will have ongoing access to the project results as they are developed. Others will gain access to technical guidance and associated materials as they are posted on ASWM website – currently linked to over 5,000 websites — and shared in webinars and conferences. Results will also be distributed through ASWM’s online *Wetland Breaking News* to 3,122 subscribers around the country. In addition the state/tribal list will be used to provide the information to over 600 state and tribal wetland program staff nationally.

QA/QC: n/a

Invasive Species: n/a

Overall Budget			
	EPA	ASWM	Combined
Personnel	102,500	27,500	130,000
Professional	80,000	20,000	100,000
Clerical	23,000	7,000	30,000
Travel	5,000	2,200	7,200
staff	5,000	2,200	7,200
			4 trips ME to DC to meet with EPA staff, 4 trips ME & MI to state/federal coordination workshop for ASWM staff
Supplies		1,000	1,000
Office materials		1,000	
Contractual	25,000	9,800	34,800

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				30 state/tribal participants to state/federal coordination workshops (15 per year 2013 and 2014)
travel scholarships	25,000	9,800	34,800	
Other	22,375	22,000	44,375	
Rent	7,000	4,000		
Computer Lease	2,800	3,000		
Printing/photocopying	1,000			state/federal workshops
Internet	400	400		
telephone	1,240	1,500		
conference facilities	9,935	13,100		state/federal workshops
training				
Total Direct	154,875			
Indirect	32,625		32,625	salaries only
Total ASWM		62,500		
<u>Total Cost EPA</u>	187,500			
Total Project Cost			250,000	

Budget: Overall roughly 65% of the costs for this project will go to salaries (including ASWM's government-approved indirect rate, which is 100% salary), 16% to travel for states and tribes as well as staff and 19% for other expenses including conference facilities for the state/federal coordination workshop in 2013 and 2014 and regular operation expenses for the ASWM office. ASWM's nonfederal cost share of \$62,500 will be comprised of \$35,000 in match from foundations (McKnight and others), \$15,000 from workshop registrations and \$12,500 in-kind donated by volunteers and facilities. All in-kind donations are documented. The estimate of all cost-share is consistent with the amount of foundation, registration and in-kind donations we have received in recent years. There is no subcontracting planned for the activities described in the work plan. Salaries will be spent carrying out the tasks described in the previous section. ASWM has kept costs down by integrating the projects directly into the core services it provides to states, wetland professionals and other parties. ASWM has established long-term working relationships with the partners identified in the project description and many

other members of the wetland community. By using its established mechanisms for communications — webpages, publications, conferences and newsletters, ASWM avoids the costs associated with creating new contact lists or establishing those partnerships at the beginning of the grant. ASWM's operating costs are lower than comparable positions with other organizations in part because the Association offices are located outside major metropolitan areas.

Programmatic Capability/Technical Experience/Qualifications

Staff Expertise/Qualifications: The Association of State Wetland Managers has a staff of seven including four professional staff, a webmaster, a program assistant and a bookkeeper. Jeanne Christie, Peg Bostwick and Jon Kusler are highly qualified wetland professionals, each with over twenty five years of experience working on wetland, water, and wildlife issues. Leah Stetson has twelve years of experience writing and working on wetlands, conservation and environmental programs. Sharon Weaver has managed ASWM's website for over 10 years. Program Assistant Laura Burchill has extensive experience organizing workshops and providing logistical support for webinars, correspondence and other responsibilities. Collectively ASWM staff form a cohesive team with has many years of experience undertaking a wide variety of successful projects to build the capacity of state and tribal wetland programs to protect and conserve wetlands. Jeanne Christie will be the lead project manager and the entire staff will assist in carrying out the project tasks under her direction.

Organizational Experience: ASWM was established in 1983 to provide a forum for communication and problem-solving among states. ASWM has been working with the states, federal agencies, and other partners on a wide variety of wetland issues for almost 30 years. States and other organizations look to ASWM for leadership in matters of national wetland

policy, applying sound science, interpreting and implementing the Clean Water Act and related programs, and restoring aquatic systems. They do so because ASWM has a strong reputation for providing accurate, useful and timely information. 5,000 websites link to ASWM's website. 584 state wetland managers and 22 tribal staff receive regular communications via e-mail and are invited to participate in ASWM's conference calls, webinars and workshops. 3,122 individuals receive ASWM's monthly e-zine *Wetland Breaking News*. In recent years ASWM has convened states, tribes, federal agencies and other partners to work on improving wetland mapping, developing 401 certification programs, complying with the Corps/EPA mitigation rule, summarizing state wetland climate change plans, developing information to support development of water quality standards for wetlands by states and tribes, clarifying Section 404 assumption requirements and other related activities that foster peer-to-peer sharing and program capacity building. Currently there are 38 states, 14 tribes and 10 EPA Regions participating in ongoing ASWM projects as well as local governments, academics, other federal agencies, nonprofit organizations and members of the business sector. ASWM has also conducted projects with individual states, including a current project to create a climate change adaptation plan for the state of Michigan.

Past Performance

ASWM is committed to designing and implementing useful, high quality projects that lead to meaningful, positive changes in the conservation, protection and restoration of the Nation's wetlands. ASWM carefully documents and develops a tracking plan for performance requirements for each new grant. Financial and quarterly reports are submitted in the timeframe required in the grant agreement. Cost share dollars are allocated, expended and tracked as part of project implementation. In addition ASWM has regular contact with the EPA project manager.

Grants are closed out with all materials submitted, including the final technical report within the 90 days following the end of the project period as provided under the grant. In many cases outcomes continue to occur after a grant ends. Below are examples showing outcomes reported in the final report and additional outcomes that occurred following the conclusion of the grant.

Outcomes from EPA WD 83418001-0

The ASWM website now has an extensive set of materials to assist states and tribes interested in developing water quality standards for wetlands. 35 states, 11 tribes and 10 EPA Regions participated in 12 webinars covering topics to assist in development of water quality standards for wetlands. The project pilot states of Montana, New Mexico, Vermont and New Hampshire are actively pursuing development of water quality standards for wetlands. Montana has also started actions to broaden the state's interpretation of the definition of waters of the state to include all wetlands.

Outcomes from EPA WD 83459001

The ASWM website now has an extensive set of materials to assist states and tribes interested in assuming Section 404 of the Clean Water Act. At the request of ASWM and the Environmental Council of States, EPA provided clarification on Endangered Species Act consultation requirements for Assumption. This clarification has allowed Oregon to re-engage in putting together a formal application for assumption. This past year the Minnesota and Virginia legislatures have directed their respective states to evaluate the assumption of the Section 404 program. Other states such as Maryland and New Hampshire have expressed increased interest. The House Transportation and Infrastructure Committee has scheduled a hearing on Assumption and invited four states to testify. This will be the first-ever hearing before Congress focused solely on state wetland programs.